

1. (Twice Amended) A method of forming an oxide region over a semiconductor substrate, comprising:

forming a nitrogen-comprising surface region layer across at least some of a silicon surface of the semiconductor substrate, the surface region extending no greater than 10 angstroms beneath the silicon surface; and

after forming the nitrogen-comprising layer, growing an oxide region from the at least some of the semiconductor substrate, the oxide region having a thickness of at least about 70 angstroms, the nitrogen of the nitrogen-comprising layer being dispersed within the oxide region.

2. The method of claim 1 wherein the oxide region comprises silicon dioxide.

3. The method of claim 1 wherein the semiconductor substrate comprises monocrystalline silicon and the oxide region is grown from the monocrystalline silicon and comprises silicon dioxide.

4. The method of claim 1 wherein the nitrogen-comprising layer is formed from plasma activated nitrogen species.

5. The method of claim 1 wherein the nitrogen-comprising layer is formed by remote plasma nitridation utilizing nitrogen species generated in a plasma that is at least about 12 inches from the semiconductor substrate.

6. The method of claim 1 wherein the nitrogen-comprising layer is formed by remote plasma nitridation utilizing nitrogen species generated in a plasma that is at least about 12 inches from the semiconductor substrate; and wherein the semiconductor substrate not being biased relative to the plasma during formation of the nitrogen-comprising layer.

*Cont'd*  
7. The method of claim 6 wherein the semiconductor substrate is maintained at a temperature of from about 550 °C to about 1000 °C during formation of the nitrogen-comprising layer.

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*S*  
8. (Twice Amended) The method of claim 6 wherein the semiconductor substrate is exposed to the nitrogen species for a time of from greater than 0 minutes to about 5 minutes.

9. The method of claim 1 wherein the nitrogen-comprising layer is formed by plasma nitridation utilizing nitrogen species generated in a plasma that is at least about 4 inches from the semiconductor substrate.

10. The method of claim 9 wherein the semiconductor substrate is maintained at a temperature of from about 0 °C to about 400 °C during formation of the nitrogen-comprising layer.

11. (Twice Amended) The method of claim 9 wherein the semiconductor substrate is exposed to the nitrogen species for a time of from greater than 0 seconds to about 30 seconds.

12. (Twice Amended) A method of forming a pair of oxide regions over a semiconductor substrate, comprising:

forming a first oxide region which covers only a portion of the semiconductor substrate;

forming a nitrogen-comprising layer across at least some of the first oxide region and across at least some of the semiconductor substrate that is not covered by the first oxide region, the nitrogen-comprising layer extending less than or equal to about 10 angstroms beneath a surface of the first oxide region and extending less than or equal to about 10 angstroms beneath a surface of the semiconductor substrate not covered by the first oxide region; and

after forming the nitrogen-comprising layer, growing a second oxide region from the at least some of the semiconductor substrate that is not covered by the first oxide region, the second oxide region having a thickness of at least about 70 angstroms.

13. The method of claim 12 wherein the first oxide region is formed by:

forming an oxide layer over the covered region and at least some of the uncovered region of the semiconductor substrate; and

removing the oxide layer from over the uncovered region of the semiconductor substrate.

14. The method of claim 13 wherein the oxide layer is formed by exposing the semiconductor substrate to oxidizing conditions.

*Cont'd*  
15. The method of claim 12 wherein the nitrogen-comprising layer is formed by remote plasma nitridation utilizing nitrogen species generated in a plasma that is at least about 12 inches from the semiconductor substrate.

*W*  
*Sel*  
16. The method of claim 12 wherein the nitrogen-comprising layer is formed by plasma nitridation utilizing nitrogen species generated in a plasma that is at least about 4 inches from the semiconductor substrate.